

IN THE CLAIMS

Please cancel claim 1 without prejudice:

1. Cancelled.

Please add the following claims:

2. A wireless communication device for fast generation of a cryptographic key, comprising:

A 1 a memory for storing said cryptographic key; and

a processor for generating said cryptographic key, said cryptographic key generated upon termination of a wireless communication and stored in said memory, wherein said cryptographic key is used for encrypting a subsequent communication by said wireless communication device.

3. The apparatus of claim 2, wherein said cryptographic key comprises a public key.

4. The apparatus of claim 2, wherein said cryptographic key comprises a private key.

5. A method for fast generation of a cryptographic key, comprising:
generating said cryptographic key upon termination of a wireless communication;
storing said cryptographic key; and
using said cryptographic key in a subsequent wireless communication to encrypt said subsequent wireless communication.

6. The method of claim 5, further comprising:
determining whether said cryptographic key has been previously stored; and
using said cryptographic key in a subsequent wireless communication to encrypt said subsequent wireless communication if said cryptographic key has been previously stored; and

generating a second cryptographic key and using said cryptographic key in a subsequent wireless communication to encrypt said subsequent wireless communication if said cryptographic key has not been previously stored.

7. The method of claim 5, wherein said cryptographic key comprises a public key.

8. The method of claim 5, wherein said cryptographic key comprises a private key.

9. A wireless communication device for fast generation of a cryptographic key, comprising:

means for storing said cryptographic key; and

means for generating said cryptographic key, said cryptographic key generated upon termination of a wireless communication and stored in said memory, wherein said cryptographic key is used for encrypting a subsequent communication by said wireless communication device.

10. The apparatus of claim 9, wherein said cryptographic key comprises a public key.

11. The apparatus of claim 9, wherein said cryptographic key comprises a private key.
